

DECLARATION

There by, declare that the entire work embodied in this student work thesis has been carried out by me at the post graduate department of studies & research in laboratory work to practice on patient report how to work in the instrument under, Dr. Nitin Muliya. This Information derived from the literature has been duly acknowledged in the text and a list of reference as provided by the lab tech.

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Year-2023-24

Signature of student:

DATE:

ACKNOWLEDGEMENTS

Would like to acknowledge and give my warmest thanks to my supervisor Mr. Harshad Vaniya from healthcare Clinical Laboratory who made this work possible, her guidance and advice carried me through all the laboratory work & that related practical. I would also grateful for working with staff member to support me in the patient report & other infield work.

Junagadh,
Submitted by,

DMLT student
Mr. Hardik Chavda

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LABORATORY PROFILE :-

Name of Laboratory :

Contact person name:

Mobile no:

Email address:

Supervisor's name:

Designation:

Mobile no:

Year of establishment:

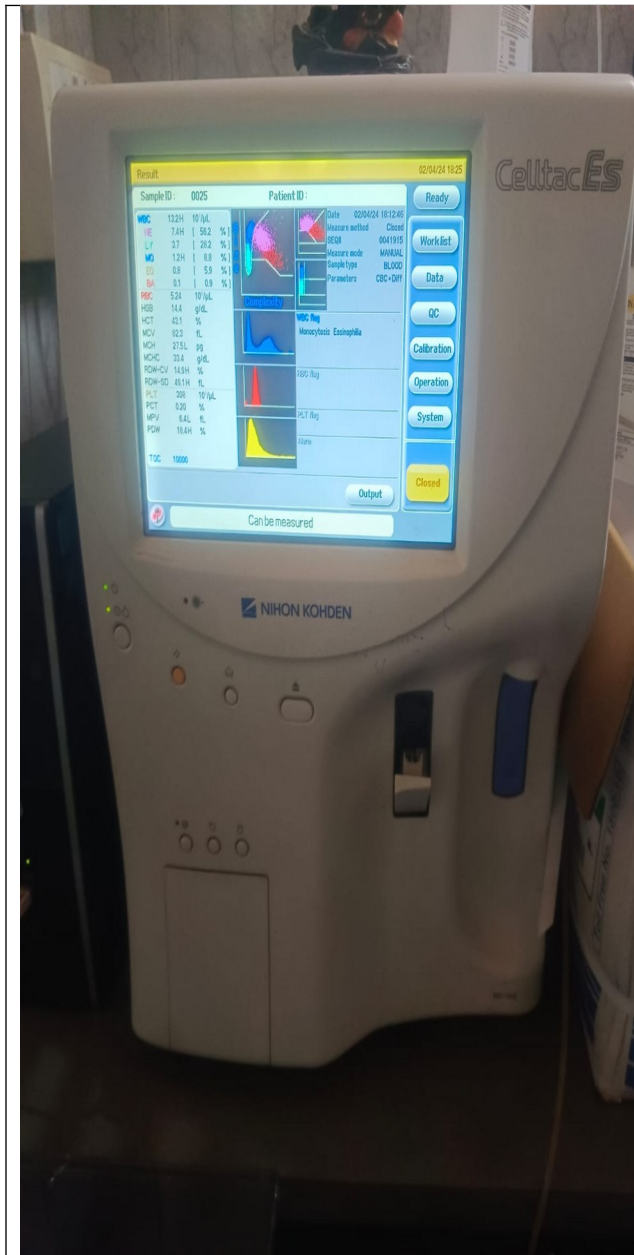
Details of testing facilities available:

Any other special information:

Machine and its Principle:

INSTRUMENT NAME:

Erba H360 CBC Machine



- The traditional method for counting cells is electrical impedance, also known as the Coulter Principle. It is used in almost every hematology analyzer.
- Whole blood is passed between two electrodes through an aperture so narrow that only one cell can pass through at a time. The impedance changes as a cell passes through. The change in impedance is proportional to cell volume, resulting in a cell count and measure of volume.
- Impedance analysis returns CBCs and three-part WBC differentials (granulocytes, lymphocytes, and monocytes) but cannot distinguish between the similarly sized granular leukocytes: eosinophils, basophils, and neutrophils. Counting rates of up to 10,000 cells per second can be achieved and a typical impedance analysis can be carried out in less than a minute.

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B) BIOCHEMICAL ANALAYSER:



- A semi-auto biochemistry analyzer works on the principle of filter photometry. The halogen lamp radiates light in all directions. The radiated light then goes through a convex lens which converges the scattered light. After that, it passes through the sample present in the flowcell/cuvette. A part of light energy is absorbed by the sample. While the remaining light transmits. This transmitted light then goes through a color filter. The color filter passes the monochromatic light to the photodetector. the photodetector transfers the light signal to an electrical signal which becomes an input for the microprocessor.
- The machine measures the absorbance of the light by the sample. Then it follows the calculation of the given

	parameter on the basis of the end- point, kinetic, or fixed time kinetics.
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4) EXPERIMENTAL ASPECTS

(MONTHLY REPORT)

Sr. No.	Date	Description of work
1	1/4/24	
2	2/4/24	
3	3/4/24	
4	4/4/24	
5	5/4/24	
6	6/4/24	
7	7/4/24	
8	8/4/24	
9	9/4/24	
10	10/4/24	
11	11/4/24	

12	12/4/14	
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23	23/4/24	
24	24/4/24	
25	25/4/24	
26	26/4/24	
27	27/4/24	
28	28/4/24	
29	29/4/24	

30	30/04/24	
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NAME OF SUPERVISOR :

SUPERVISOR'S NAME :

DATE :

<input type="checkbox"/> EVALUTION CRITERIA	SCORE
1. Overall attendance	/10
2. Interest in work	/10
3. Work ethics	/10
4. Problem solving	/10
5. Oral communication skill	/10
6. Written communication skill (e.g. computer)	/10
7. Technical of work performed	/10
8. Quality of work performed	/10
9. Leadership	/10
10. Team work	/10
Total: 100	

COMMENTS :

- ☐ Supervisor's name :
- ☐ Designation :
- ☐ Mobile no :
- ☐ Signature :
- ☐ Date :